

REMARKS

I. INTRODUCTION

Claims 2, 10, 12, 14, 15, 18, 19, and 26 were previously canceled. Independent claims 1 and 11 have been amended to recite, *inter alia*, the step of applying electromagnetic radiation to the predetermined area of skin so as to produce or generate thermally damaged regions in at least an epidermal portion of the skin based on an interaction between at least one applied chromophore and the electromagnetic radiation. Exemplary support for these amendments can be found, *inter alia*, in paragraphs [0024], [0033], [0036], [0037], and [0066] of the originally-filed specification (U.S. Publication No. 2007/0264288, the “published application”). Dependent claim 3 has been amended to recite, *inter alia*, that the step of removing a first portion of the at least one chromophore from a surface of the skin is performed prior to applying the electromagnetic radiation. Exemplary support for this amendment can be found, *inter alia*, in paragraphs [0035] and [0039] of the published application. Claim 27 has been amended above to remove a minor informality therefrom, but not for any reason relating to patentability thereof. New claims 31 and 32 have been added. Exemplary support for the subject matter recited in these new claims can be found, *inter alia*, in paragraphs [0066] and [0068] of the published application.

Accordingly, claims 1, 3-9, 11, 13, 16, 17, 20-25 and 27-32 are now under consideration in the present application. Provided above, please find a claim listing indicating the current amendments to the previously-pending claims, and the status of

other claims on separate sheets so as to comply with the requirements set forth in 37 C.F.R. § 1.121. It is respectfully submitted that no new matter has been added.

II. INFORMATION DISCLOSURE STATEMENT

In the Office Action, the Examiner indicated that copies of certain foreign documents and non-patent literature listed in the Information Disclosure Statement submitted on April 4, 2008 have not been included therewith. Applicant is aware that the U.S. Patent and Trademark Office believes that it did not receive copies of such documents, and is in the process of collecting such references for submission. Thus, to expedite the prosecution of the present application, copies of these documents shall be provided for the present application to the Examiner in a separate communication.

Applicant respectfully requests that the Examiner consider such later-provided documents, initial SB/08A document which lists such documents, and provide the initialed SB/08A document to Applicant's representative in a subsequent communication.

III. REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH SHOULD BE WITHDRAWN

Claim 3 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite because recitation of the limitation "of the skin" lacks antecedent basis. As the Examiner shall ascertain, independent claim 1 has been amended herein above to recite the feature of skin, thereby providing a proper antecedent basis for such

recitation of claim 3. Accordingly, Applicant respectfully requests that the rejection of claim 3 under 35 U.S.C. §112, second paragraph be withdrawn.

IV. REJECTIONS UNDER 35 U.S.C. §§ 102 AND 103 SHOULD BE WITHDRAWN

Claim 1 stands rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Publication No. 2003/0159615 by Anderson et al. (the “Anderson Publication”). (See Office Action, page 2). Claims 1, 3, 4, 6-9 and 27-30 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the Anderson Publication. (See *id.*, pages 3 and 9). Claims 5, 11, 13, 16, 17, 20-23, and 25 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the Anderson Publication in view of U.S. Patent No. 5,836,998 issued to Mueller et al. (the “Mueller Patent”). (See *id.*, p. 6). Claim 24 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the Anderson Publication in view of Mueller Patent, in further view of U.S. Publication No. 2002/0091311 of Eppstein et al. (the “Eppstein Publication”). (See *id.*, p. 8). Claims 27-30 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the Anderson Publication. Applicant respectfully asserts that the Anderson Publication, either taken alone or in combination with the Mueller Patent and/or the Eppstein Publication, fails to disclose, teach, or suggest the subject matter recited in amended independent claims 1 and 11 and the claims which depend from them, for at least the reasons set forth below.

The Anderson Publication relates to microparticles that can be used to form skin markings, such as tattoos, where such markings may be removed by

application of energy, such as optical radiation. (See Anderson Publication, Abstract, and para. [0016]).

The Eppstein Publication describes methods and apparatus for increasing permeability of a biological membrane using a pyrotechnic charge to form openings therein. (See Eppstein Publication, Abstract, and paragraph [0041]). The methods and apparatus of Eppstein can be used with a substrate containing pigments, where the pigments are forced into the skin by the charge to form a tattoo. (*Id.*, para. [0044]).

The Mueller Patent describes the use of a stencil for body art whereby a stain is applied to a predetermined epidermal area delineated by the stencil. (See Mueller Patent, col. 1, line 65-col. 2, line 11).

Independent claims 1 and 11 have been amended herein above to recite methods for fractional wounding of tissue that includes, *inter alia*, applying at least one chromophore to a predetermined area of skin, and applying electromagnetic radiation to the predetermined area of skin **so as to produce or generate a plurality of thermally damaged regions (or regions of thermal injury) in at least an epidermal portion of the skin based on an interaction between the at least one chromophore and the electromagnetic radiation.**

Applicant respectfully asserts that the Anderson Publication does not teach, suggest or disclose any method in which **a plurality of thermally damaged regions (or regions of thermal injury) of tissue are generated or produced in at least an epidermal portion of the skin** based on an interaction between one or more chromophore(s) and an electromagnetic radiation, as explicitly recited in amended

independent claims 1 and 11. In contrast, the Anderson Publication describes only a method for removing microparticles containing chromophores that are located in the dermis region of skin tissue. (See Anderson Publication, paras. [0005], [0012], [0133], and [0134]). For example, the Anderson Publication states, in part, the following:

“Tissue markings in skin **must** be properly placed to provide permanent markings. Skin is composed of the outermost epidermis, generated by the constantly dividing stratum basale, and the underlying dermis. Dermal cells, such as fibroblasts, mast cells, and others, which do not generally replicate, are located within a resilient proteinaceous matrix. **It is the upper dermis, below the stratum basale, into which the microparticles are implanted to provide a tissue marking** (such as a tattoo).”
(*Id.*, para. [0133]; **emphasis added**).

Applicant respectfully asserts that any damage to tissue arising from the methods described in the Anderson Publication are minimal and undesirable, and therefore are not relevant to the present disclosure in which particular patterns of thermal damage are produced in skin tissue. Nevertheless, the Examiner acknowledges that any damage to tissue arising from the methods described in the Anderson Publication is minimized and local to the chromophores, which **must** be placed in the **dermis**. (See Office Action, page 13).

Thus, for at least the reasons provided herein above, Applicant respectfully asserts that the Anderson Publication fails to teach or suggest a method for fractional wounding, much less one that includes applying at least one chromophore and an electromagnetic radiation to a predetermined area of skin **so as to produce or generate a plurality of thermally damaged regions (or regions of thermal injury) in at least an epidermal portion of skin** based on an interaction between the

chromophore and the electromagnetic radiation, as recited in amended independent claims 1 and 11 of the present application. Applicant further re-asserts that the Anderson Publication actually teaches away from such subject matter that includes producing regions of thermal damage in skin tissue. The Eppstein Publication, which describes a technique for forming artificial openings in a biological membrane, does not cure at least such subject matter.

The Mueller Patent describes an adhesive stencil that can be used to apply a decorative epidermal stain to skin to produce a temporary “tattoo.” (See Mueller Patent, Abstract; col. 1, line 66-col. 2, line 1; and col. 3, lines 31-40). Applicant respectfully asserts that the Mueller Patent, which describes application of an epidermal stain using a stencil, is not combinable with the Anderson Publication, which describes an implantation of chromophores in the dermis to generate a tattoo, where the chromophores can be altered or removed by application of electromagnetic radiation.

Accordingly, Applicant respectfully asserts that the Anderson Publication, even if combined with the Mueller Patent and/or the Eppstein Publication to the extent that such references may be combinable, fails to anticipate or render obvious the subject matter recited in amended independent claims 1 and 11, and the claims that depend therefrom for at least the reasons provided above.

Thus, withdrawal of the rejections of these claims under 35 U.S.C. §§ 102(b) and 103(a) is respectfully requested.

V. CONCLUSION

In light of the foregoing, Applicant respectfully submits that all arguments raised in the Office Action have been addressed and that all pending claims 1, 3-9, 11, 13, 16, 17, 20-25, and 27-32 are in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited. The Examiner is invited to contact the undersigned to expedite the prosecution of this application if any issues remain outstanding.

Respectfully submitted,

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By: 

Gary Abelev
Patent Office Reg. No. 40,479

DORSEY & WHITNEY, L.L.P.
51 West 52nd Street
New York, New York 10019-6119

Attorney(s) for Applicants
(212) 415-9371